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(54) Title: SILOXANE RESIN-BASED ANTI-REFLECTIVE COATING COMPOSITION HAVING HIGH WET ETCH RATE

(57) Abstract: Herein we disclose a composition, comprising a siloxane resin having the formula $(\text{HsiO}_{3/2})_a(\text{SiO}_{4/2})_b(\text{HSiX}_{3/2})_c(\text{SiX}_{4/2})_d$, wherein each X is independently -O-, -OH, or -O-(CH₂)_m-Z_n, wherein each m is independently an integer from 1 to about 5, Z is an 5 aromatic moiety, and each n is independently an integer from 1 to about 6; $0 < a < 1$, $0 < b < 1$, $0 < c < 1$, $0 < d < 1$, and $a + b + c + d = 1$. We also disclose methods for preparing the siloxane resin composition and a method of preparing an anti-reflective coating on a substrate, wherein the anti-reflective coating is derived from the siloxane resin composition.



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